

October 21, 2016

EX PARTE NOTICE

Ms. Marlene Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Transition from TTY to Real Time Text Technology, CG Docket No.16-145

Dear Ms. Dortch:

On Wednesday , October 19, 2016, the undersigned, Jeroen de Witte and Andre Williams of Airbus DS Communications (ADSC) met with David Furth, David Siehl and Tim May of the Public Safety and Homeland Security Bureau, Robert Aldrich, Karen Peltz Strauss (via phone), Suzanne Singleton, Michael Scott and interpreters of the Consumer and Governmental Affairs Bureau (CGB).

The purpose of the meeting was to discuss issues concerning Real-Time Text (RTT) and its impact on 9-1-1 Call Handling Systems and Public Safety Answering Points. During the meeting ADSC answered a series of questions provided by the FCC in advance of the meeting and addressed any follow-up questions. The questions covered were as follows:

1. Do your CPE NG911 implementations implement RTT (RFC 4103)? If not now, do you have implementation plans?

ADSC's current NG911 platform does not yet support RTT. The development of RTT support in the platform is planned and is on the current product development roadmap.

- a. How large is that development?

The development of RTT support within our NG911 platform will leverage what has already been developed, and which exists, for SMS Text-to-9-1-1 (MSRP) processing. Therefore, the development of RTT support is not anticipated to be significant.

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2. Do your pre-NG implementations handle (SMS) text-to-911? Via IP or otherwise?

Yes, ADSC's pre-NG platforms handle SMS based Text-to-9-1-1 using either a web app (typically provided by the TCC) or through Text-to-TTY using the platforms existing inherent TTY capabilities.

a. Can you describe the pre-NG platforms TTY processing capabilities?

Airbus pre-NG products support an integrated TDD/TTY capability. The TDD/TTY functionality is incorporated into every workstation of the pre-NG platforms. TDD/TTY calls have all the same functionality of voice calls and the presence of TTY/TDD tones is auto-detected. The entire communication is logged and readily retrievable. Pre-programmed messages are available to assist telecommunicators when communicating with the TDD/TTY caller. Messages can be grouped within functional categories (i.e. fire related, EMS related, police related, etc.). The telecommunicator can use these pre-programmed messages or interact in real-time messages with the 9-1-1 TDD/TTY caller via direct keyboard input. The TDD/TTY transcript is able to be appended as part of extended version of the NENA serial CAD interface for inclusion with the CAD incident record.

b. Do the same (SMS) Text-to-911 processing capabilities exist in the NG911 Platform?

Yes, ADSC's NG911 platform has the same SMS based Text-to-9-1-1 capabilities wrt web app and Text-to-TTY but also provides integrated Text-to-9-1-1 call processing capability (MSRP). The telecommunicator experience and operational model for (SMS) Text-to-9-1-1 is similar to that of a TDD/TTY call. When a SMS 'call' is delivered to the NG9-1-1 platform, the telecommunicator can concurrently manage multiple SMS sessions and optionally voice calls at the same time. This behaviour is configurable based on local operational policy. Pre-programmed messages are available to assist telecommunicators when communicating with the (SMS) Text-to-9-1-1 caller. Messages are typically grouped within functional categories (i.e. fire related, EMS related, police related, etc.). The telecommunicator can use these pre-programmed messages or enter their own messages with the (SMS) Text to 9-1-1 caller via direct keyboard input. The (SMS) Text-to-9-1-1 transcript is readily retrievable locally at the console position or via the MIS sub-system. The session transcript is also available as part of extended version of the NENA i3 log event interface so that it is available to be associated with the CAD incident record or captured by digital loggers/i3 event loggers. The (SMS) Text to 9-1-1 call is also plotted on Airbus geo-mapping solutions.

3. If yes, what would be the best way to convey RTT to your CPE for pre-NG PSAPs, either now or in a year or two? (Assuming such PSAPs have Internet connectivity.)

The ADSC embedded base has been transitioning to the NG911 platform at quite a strong rate. ADSC anticipates that the remaining base will transition within the next 2-3 years. Therefore, ADSC plans to introduce RTT capabilities into what are now pre-NG PSAPs through the NG911 platform transition.

a. For those PSAPs that do not transition to your NG911 Platform, how will you support RTT?

Given the high adoption rate of our NG911 platform, we would encourage those PSAPs that have not transitioned to migrate to the NG911 platform to support RTT. Alternatively, we may work with a partner or have the PSAP leverage other commercial offers to enable RTT support via an over-the-top web based solution.

4. How do you currently handle TTY in pre-NG911 and NG911 deployments? Is text logging integrated?

Airbus platforms, both pre-NG9-1-1 and NG9-1-1 platforms, have integrated TTY capabilities. The TDD/TTY functionality is incorporated into every workstation of the pre-NG9-1-1 platforms. TDD/TTY calls have all the same functionality of voice calls and the presence of TTY/TDD tones is auto-detected. The entire communication is logged and readily retrievable.



Pre-programmed messages are available to assist telecommunicators when communicating with the TDD/TTY caller. Messages can be grouped within functional categories (i.e. fire related, EMS related, police related, etc.). The telecommunicator can use these pre-programmed messages or interact in real-time messages with the 9-1-1 TDD/TTY caller via direct keyboard input. The TDD/TTY transcript is able to be appended as part of extended version of the NENA serial CAD interface for inclusion with the CAD incident record.

5. What, if any, experiences are you aware of regarding the use of legacy TTY calls in PSAPs, e.g., in terms of frequency, reliability, handling by PSAP call takers?

Based on conversations with customers, it is our understanding that TTY call volumes are generally low. However volumes do vary from region to region. For instance, one ADSC customer that has a school for the hearing impaired within its jurisdictional boundry, experiences a higher volume of TTY calls than many other PSAPs.

Because of the generally low volumes some PSAPs have established monthly TTY testing. Testing involves the placing to TTY test calls to the PSAP to ensure the proper functioning of TTY equipment and the TTY call handling proficiency of telecommunicators.

- a. How did this testing go?

Based upon reports received from PSAPs, this scheduled testing has gone well in that it helped identify technical and/or operational issues and allowed PSAPs to proactively remediate those issues.

6. How closely do you work with the TCC (text control center) operators Comtech TCS and West (others)? What fraction of messages or PSAPs are served by the web browser, NG911 (MSRP) and TTY approaches? How do you relay messages to PSAPs served by West or other TCCs? Via MSRP or some other approach? How does text-to-911 logging and geo display work for the web browser solution? Do you provide interfaces (APIs) to CPE solutions?

Airbus has close working relationships with both national TCC operators; Comtech TCS and West as well as TCC aggregators such as INdigital and Agent511. We have established lab-to-lab interconnectivity to enable interoperability (IOT) testing between the TCC and Airbus NG9-1-1 platform. This IOT testing is focused on MSRP based interface and validates both functional behaviour as well as fault/recovery behaviours. We have also validated co-habitation of the web browser solutions provided by the TCCs to operate from the same computing platform as the 9-1-1 call handling console. Airbus does not track the percentage of its PSAPs which it serves which have adopted the web browser or TDD/TTY approaches all though we know there are many. The NG9-1-1 MSRP migration rate has been limited but is currently ramping steadily.

The text-to-911 logging and geo display work for web browser solution is provide by the TCCs and is not integrated with the Airbus 9-1-1 CPE



7. Do your text implementations (RTT, text-to-911, MSRP) support pre-canned call taker responses? Are they customizable?

ADSC's platforms support customizable "canned" messages for both TTY (pre-NG and NG911 platforms) and Text-to-9-1-1 (NG911 platform/MSRP). Once introduced into the NG911 platform, RTT will possess similar customizable "canned" message functionality.

8. Have you encountered issues with non-English text messages? If so, any thoughts on how to handle such messages?

While ADSC is aware of the issue of non-English test messages, and efforts going on at this time surrounding this challenge (e.g.-DHS Text-to-9-1-1 translation project), it has not had customers questioning it about this.

With regard to Text-to-9-1-1 translation Airbus has created a demonstrated a proof of concept at NENA/APCO in conjunction with Language Line Services LLC.

9. Would it be possible to comment on the use of emoticons as part of the Text-to-9-1-1 communications?

Once standards are established, emoticons could be incorporated into ADSC's' call handling platforms.

ADSC believes the standards would be needed to identify;

- Which emoticons are available across the multiple platforms and devices*
- Which emoticons will be utilized by public safety*
- The definitions of selected emoticons in a public safety environment*

Additionally, ADSC believes that there are operational considerations such as;

- Call handling policy and procedure development*
- Telecommunicator training.*

- a. What group(s) would be appropriate to develop these standards?

ADSC believes that NENA and APCO would be the most likely organizations to develop these standards.

10. Can you comment on the ability to do both voice and RTT

The Airbus NG9-1-1 platform has the capability to support concurrent voice and Text calls; the text calls would have to be delivered via IP utilizing MSRP (SIP) or RFC4103 (RTT).



Airbus DS Communications appreciates the opportunity to meet with the Public Safety and Homeland Security and Consumer and Governmental Affairs Bureaus. Should you have any questions, please do not hesitate to contact me.

Respectfully submitted,

Jeffrey A. Wittek
Chief Strategic Officer
Airbus DS Communications

